Review Article

On the Cause of Violence Expressed as Organized Hooliganism

Emanuel Gluskin

Kinneret Academic College in the Jordan Valley (on the Sea of Galilee), 15132, Isreal

*Corresponding Author: Emanuel Gluskin; email: gluskin@ee.bgu.ac.il

Received 27 November 2013; Accepted 8 April 2014

Academic Editor: Waguih William Ishak

Copyright © 2014 Emanuel Gluskin. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Abstract. The hypothesis is put forward that hooligan behavior is based on some unperceived protest of an individual, or a group, *against intellectual overstress*, or, equivalently, it is based on the individuals' intuitive *fear* of such overstress that the society imposes (or "threatens" to impose) on them. The violent actions of the hooligans combine the quick movements that develop (activate) the left hemisphere of the brain, and the cruelty that *prevents* development (activity) of the right hemisphere, which improves the balance in the development of the hemispheres. Hooliganism indicates an important alarm informing one about the increasing intellectual stress in the society, which indeed is unhealthy for many. The hooligans need help, which, as the recent "days of violence" show, is rather urgent. However, the things to be changed are traditional, not well controlled, and thus hardly can be changed quickly. Some constructive suggestions are formulated re improvement of the informational (intellectual) "feeding" of the population. Since committing suicide is a kind of violence that one applies to himself, such an improvement should reduce not only the "external" hooliganism, but also the relative number of suicides.

Keywords: Sociology, cruelty, mind science, public health, anti-Semitism, Neo Nazism, "days of violence," students' (research) projects

1. A Point of View on the Hooliganism

The present communication is motivated by the omission in [1] of the important topic of hooliganism, which becomes most obvious in view of the not really understood "days of violence" [2] that recently have shocked some civilized societies, including, for example, that of Great Britain. The latter events, showing a new aspect of hooligan behavior, which seems to be "hooliganism for hooliganism" or violence without any visible profit, support the hypothesis of [1] that is applied now to the "simple" hooliganism, showing, however, that it is not so simple.

Let us recall that [1] considers a unique (but scientifically exceptionally important) case of cruelty (the Holocaust) and argues that it was caused by an intellectual overstress of a significant part of the German population, which had been expressed as a very unusual mental disease/disorder. Any attempt at explaining the Holocaust by the usual arguments, associated with common human needs and logic, does not provide any convincing explanation, especially on the background of the traditionally high morality of Germans.

Observing that the terrible cruelty of the Holocaust was *strangely expressed*, – *not as the psychically normal human hate*, [1] putsforward the hypothesis about a mental problem

in Nazis, associated with an *unbalance* (asymmetry) in the development of the brain hemispheres. Namely, considering the nature of the different functions of the hemispheres (e.g. [3–5]), [1] concludes regarding the role of the relative overdevelopment of the *right* hemisphere that cruelty was needed to stop further development of this hemisphere. Connecting the neurology argument with the "social psychiatry," [1] writes:

"Hitler was a strong leader with an intuitive ability to understand the crowd, but was very poorly educated in any sense, which was, obviously, absolutely not appropriate for a man who had gained such power, and Hitler in power is seen here as an unperceived rebellion of Germans against the intellectual overstress."

(See [1] for the argument re the overstress.) That the asymmetry in the development (activity) of the brain hemispheres can be associated with aggressiveness, is supported today by the recent investigations [6–8] (see especially [7]). Though the usual aggressiveness is not the strange cruelty of the Holocaust, our opinion is that the basic reasons for the organized hooligan behavior are of the same *nature* as the Nazis' behavior, even if the scales of the problems being touched are very different. In both cases, cruelty is aimed [1] to restore the balance between the creativity of the right hemisphere and the simple-physical-activity of the left hemisphere. In some immediate sense, the opinion that the situation with the Holocaust is the extreme case of hooligan behavior, is also supported by the obvious fact that Neo-Nazism is a version of hooliganism.

Besides observing psychological specificity of the organized hooliganism, a very important point of the present analysis is that we stress *society's guilt* associated with improper informational (rather, intellectual) "feeding" of population. There is no one who can be called "bad" here; we speak about those whose *intellectual development and education* do not allow them to accept *intellectualism as a society ideal*, and who feel themselves helpless before *just such* approach to intellectualism by the means of public information. In other words, we say that the different degrees of complexity of thinking, in different groups of the population, become the source of a serious trouble expressed in the days of violence.

More precisely, we assume that a hooligan resists the intellectual overstress imposed on him by modern society, and has an intuitive, or even organic, necessity in maintaining (this should be important for any human) the *balance* in the development of the brain hemispheres, for conserving his spiritual health. Protesting against the reality that makes him (or threatens to make him) "unbalanced," he tries to destroy this reality, demonstrating that the activeness of the *left hemisphere* is more important for him. He combines in his violent actions, the intensive quick movements that develop the left hemisphere, with the cruelty that prevents any activity of the "becoming too developed" right hemisphere. That is, he realizes "in small" what, according to the hypothesis of [1] Nazis realized in large, that is, the war-activity for the development of the left hemisphere, and the cruelty of the

Holocaust for stopping the activity and development of the relatively too strongly developed right hemisphere.

See also works [9–12] that give some more arguments re the psychological situation and the assumption that violence simplifies this situation for one. (In the set of slides [10] the last section, "Informational 'Feeding'," is most relevant; the relative overdevelopment of the right hemisphere is called in [10] "the R+ problem.")

Observe that we have to *distinguish* between *violence* associated with the tendency to stop the development (activity) of the brain's right hemisphere, and the physical *hooliganism* associated with the tendency to develop (stronger activate) the left hemisphere.

Unfortunately, a WEB search on the topic of hooliganism leads to a huge number of sources related to "soccer (football) hooliganism" weakening the behavioral frames for a couple of hours, and not to the basic *scientific*, *psychological*, *and neurological causes* for hooliganism, which interest us, in particular, in view of the "days of violence" not associated with any attractions. Already the very focus of the media (where references on scientific publications should appear) on only the minor things shows that the present argument is necessary.

Noticeably, understanding the problem of hooliganism *as it is formulated in the above*, we do not even mention any police actions, because our concerns are not associated with the application of any force. The psychological reorganization should be done quickly, otherwise there will be only brutal force to control the defined hooligans, which will show a shameful helplessness of society in the important field of its spiritual health, and will not eliminate the problem.

Below (see also [11]), we focus on the human's organic necessity in **treating** the received information. Motivated by an argument of Erwin Schrödinger [14], related to the role of entropy in physiological feeding and digestion, we pass on (system theory requires such generalizations) to the *intellectual feeding and digestion*, considering the role of entropy in the "structure" of our thinking. Thus, improperly selected or improperly prepared information is compared to food that one cannot normally digest, and it is argued that the editors of the information sources (radio, TV, Internet) have to restructure, in the informational sense, and strongly contract their programs, and that this topic, associated with sociology, psychology, psychiatry, and biology, is urgent for academic research.

2. On the Complexity Causing the Intellectual Overstress

How are we to scientifically characterize the intellectual overstress, understood not as the *resulting* (the output) disharmony in the development of the hemispheres, but as an *input* of our intellectual (thinking) system? (See also [12].) Where is the mechanism of the danger contained in this input?

In order to see the point simply, let us compare our intellectual "food," that is, the information given to us, with the usual food, and note the opinion of [14] that the important feature/role of the physiological digestion (eating) is that it decreases the body's entropy ([9, 10] explain this in much more concrete terms than [14] does) whose maximization, according to [14], means death. Thus, we come to the role of complexity, and then to the necessity for simple people to have "clear mind" for a normal life, which is worth fighting.

Obviously, the "food-analogy" means that for one be able to intellectually live, that is, to satisfactorily coexist with the informational media, this media must be such that one could *treat* it in his thought, *decreasing the "entropy"*, that is, making these thoughts clear and more ordered. This is very similar to what we need regarding the usual food that not just supplies us with the energy, also (and in the long time scale, *mainly*, [9, 10, 14]) allows us to keep the structure of our body and physiology, which is associated with *periodic decrease of entropy* during the processes of the digestion of the food.

3. Some Academic Aspects

Regarding the concept of entropy, belonging both to physics and information theory, and very widely used in [10], see, for example, [15], considering, however, that replacement of "entropy" by "microscopic disorder" or "complexity" may suffice in the present discussion.

The complexity of a (technical or mathematical) logical scheme can be rigorously defined as the excess of the number of its vortices over the number of its inputs. (See [16] and especially [17] for a more complete mathematical approach.) It has to be seen that in both the physiological [14] and intellectual (informational) senses we have to be fed ([9, 10] for a more precise formulation) by negative entropy in order to remain simple and thus survive.

In the intellect (information) "digestion" problem, we speak about the number of the brain neurons *involved in the processing*, or the area/volume of the brain, *activated* in the process. Obviously, a large activated volume means a high complexity of the logical system, or high entropy of the structure of the processing system. The question of how the complexity of the logical system (the number of its vortices) depends *on the number of the inputs* (i.e., on the complexity of the information being received) is one of the central issues here.

According to the citations in [18] of some known painters and academic teachers, the painting of a composition of objects is strongly different from the painting of a single object. While for a single object, the *precision* in the painting is of great value, *for a composition (more inputs!) the creativity element is required* for one to be considered a good painter. Since this means that the ways of treatment of the visual information are expected to be different in the two cases, the complexity of the system and its entropy should

be *very much increased* with the increase of the number of the inputs.

The *treatment* of information in our mind/brain must, from time to time, decrease the electrically activated area of the brain and thus the entropy of the logical scheme. The always-existing natural attempts of the brain to treat any data (that might be too massive or "untreatable") may cause an overload of the right brain's hemisphere, and here is the connection with the hypothesis of [1] and the concern regarding the sociological situation.

Resent investigations of brain activity presented in [6–8], considering (both theoretically and experimentally) the frontal part of brain, reveal connection of asymmetry in the activity of the brain's hemispheres with aggressive behavior. Even though the approaches of [6–8] are very distant from our "system argument," this material is supporting here. See also the analysis of [12].

4. The Role of Society

That the actual *guilt* for the "days of violence" is that of the society, is the most painful point we face along the present line of thought. That our intellectual perception has some natural (organic) limitations just as our digesting or any other physiological (biological) ability has, is not taken into account when the informational (intellectual) stress is continuously developed (often just for one's financial profit, rather aggressively) in the society.

It is dangerous to allow this stress to grow. It may be said that the *intellectual hooliganism of the informational means* of the modern society, that is, the taking by force of our free thought, or making it more complicated, leads to the physical hooliganism of those people frightened and disturbed in their thoughts, who are defined by society as hooligans and indeed become more and more dangerous for the society. Figure 1 schematically illustrates this paradoxical, clearly unhealthy situation.

In a very rough, but easy to memorize form, the thesis illustrated by Figure 1 sounds as follows:

"If, using aggressive information supply, that is, presenting the information so that people cannot quietly treat it, you will not let people decrease the entropy of their thoughts, then these people will tend to increase the entropy of the physical state of the society."

Or more philosophically:

"The absence of some needed intellectual order in the human, can cause an unlimited (depending on the energy that can be involved) physical disorder in the society."

The egocentrism, making hooligans physically dangerous, is an automatic result of the *internal* character of their problem associated with the asymmetry in the operation of the hemispheres. We must very seriously think about social therapy for the psychological overstress that can occur in many by our own guilt. The impression is that most of the

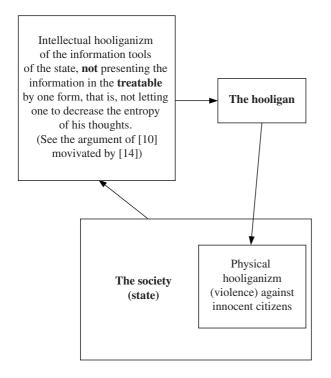


Figure 1: The schematic "transformation of the hooliganism" from the intellectual form to the physical one. The hooligan is the "transformer." He is shown placed out of the society because of his exceptional egocentrism, associated with the fact that his problem is an *internal* one. (Compare with [1].)

hooligans *do not want* to come to the dangerous mental state described in [1] (this is a part of the reason for their worry and unrest), and we must help them in this.

The human necessity in receiving simply *treatable*, and not just *understandable*, information has to be most respected. "In principle, understandable, but not treatable" means "Making one worrying and aggressive." Treatable information has to order human thinking, causing one to relax.

It is difficult to fight against your own light-mindedness, but we must become more serious regarding the field of our psychology and psychics, just as we must become more serious regarding damage of the ionosphere that defends us from the dangerous ultra-violet radiation of sun, and other troubles caused by our impetuous, poorly controlled, activity.

5. Some Points for Further Consideration

5.1. Some philosophy ad hoc: science, religion, art, and ...informational media. It is inevitable that the world of our mind is strongly (perhaps even catastrophically quickly) changed by us, and, for instance, besides the classical analytical methods of science, the computer's power is now employed. Similarly, the information media appeared in our life in addition to science, religion and art which people started to simultaneously develop long ago.

However, can we really say that now science, religion, art, and informational media have to feed our basic, organically necessary thinking? Are we really so drastically biologically changed, for our mind to require one more fundamental component? It rather seems that we are given the needs and the abilities of our mind *once and forever*, just as we are given once and forever the physiological needs and abilities for the regular food digestion.

It is quite appropriate to recall the words "gossip causes hate" from the ancient (central in Kaballah) "Zohar" book. These words (ascribed to Rabbi Shimon bar Yochay, in brief, *Rashbi*, 135 C.E. - 170 C.E.), seem to be most relevant to the subject of aggressive (overwhelming) methods of delivering information and the resulting hooligan response on the streets, because sometimes the greater part of the information delivered to us indeed is one big, never really examined, gossip, causing unnecessary worry.

"Communication" is a leading track at electrical engineering departments, and communication science well motivates technological developments, but the wish to communicate has become a kind of societal euphoria, and *modern society is simply not able to keep or tolerate silence* letting people think out what they have already heard/learned from the intensive information flow. What for do we need information if we cannot treat it? (Compare again with the physiological digestion of the usual food.) See also [12].

5.2. The legal aspect. Since hooliganism is a kind of criminality and hooligans have to be punished, courts have to see the distinction between the spontaneous impulsive hooligan actions of the type of "soccer (football) hooliganism," which may be simply expressed as the lack of discipline in a spoilt, grown-up child, and the hooliganism of the "days of violence" with its deep internal cause, associated with the wish of people to have a clear mind helping them to work, to safely drive the car, to quietly communicate with the members of their families, that is, to be able to keep (support) themselves and their families, and be respected as they are. They see before their eyes their families which they will not be able to support without some simplification of the psychological reality which they hope to most simply achieve by the violence. The words "able to support" relate to spiritual health. It is sufficient to consider the slogan of the days of violence, "we, the society, and this world need violence," in order to see that this (no less spontaneous than organized) violence has no immediate relation to the usual hooliganism that is very often explained with reference to the problems of social welfare. The call was for violence and not for hooliganism. No "days of hooliganism" were announced. Violence per se was/is "needed," because it simplifies the intellectual atmosphere. The defined (of this type) "hooligans" are not proud of any effective hooligan actions. Exhibiting violence they do not receive any external (certainly not immediate) benefit or profit. They are alarmed by their internal psychological problem, - the necessity to simplify the psychological situation imposed by the growing complexity of their mind. While helping them to relax, the cruelty cannot reduce the worry and make them happy.

As was explained in Section 4, the guilt is first of all in the careless attitude of the society to the *psychological needs* of simple people, and it appears that the defined hooligans non-legally punish society, to be then legally punished by it. The *absence of understanding and correct communication, on the side of the society*, is the essence of this unhealthy and dangerous situation.

Undoubtedly, the given explanation has to be considered in courts, in seek of justice.

5.3. The aspect of Neo Nazism. When approaching it as a case of the relevant hooliganism, one notes that Neo-Nazis special orientation against Jews can be associated with the relatively intensive intellectual activity of this small nation that has some inherent respect of intellectualism. However it is not less important that Jews gave the world very important Prophets, and, on the psychological regard, one can see here also some unperceived pressing request, via the threat and violence, of the Neo-Nazis to Jews, - for a Jewish thinker to arise who would be more helpful in solving the Neo-Nazis (hooliganism's) problem, than all that they try now to do by the open violence. This assumption is less improbable than it seems at first, because the actual killing is rarely of a really influential person (i.e., it cannot help), and it is difficult to see sense in some other anti-Semitic actions, as, for instance, damaging grave-stones. All this seems to be creating pressure on something undefined by one who has and hates his internal problem to be solved in some unknown to him way.

6. Main Conclusions

- 1. Since hooligans warn against the intellectual overstress being continuously increased in society, and since such a stress indeed is not healthy for many, the very warning (but not the way it is expressed) has to be respected, and this respect has to be shown.
- 2. Communication and negotiations with hooligans are necessary in order to well understand their internal problem, and be able to predict and prevent it. The difficulty is that we have to understand the hooligan better than he understands himself. "Negotiations with hooligans" should be an academically developed topic, and the defined hooligans should know that though they will be physically controlled, they are not hated, nor ignored by the society, and that their problem will be solved in a good spirit.
- **3.** The educators and rulers should try to prevent intellectual overstress in large groups of population. Technical progress should not be a monster growing up and living near us according to its own genetic and behavioral rules (including the informational means rules) that ignore our basic physiology and neurology, and thus *hooliganically*

challenge our psychology. Nobody, including those defined as hooligans, should be sacrificed for the technical progress. Such topics as "Spiritual health and technical progress" should be developed in academia, with clear instructions finally formulated.

- **4.** Hooligans should have explained to them the basic point of the unbalance in the development of the brain hemispheres (see [10]). This could develop in one some self-control of one's interests and behavior, so that one can become more open and give helpful information and even ideas on how to improve the situation.
- **5**. In a general scope, hooliganism, in its modern appearance, is an important topic for study, related to the basic problems of the *intellectual state* and *intellectual development* of society, i.e., to some "society's psychiatry" relevant to sociology.
- **6.** Since the freedom to deliver information all over the world is given by the advanced democracy, and since, as is argued, this activity of the means of information does *not* correctly serve people, we face *fundamental problematicity* in the mutual relation of democracy and intellect.
- 7. The position that improvement of the informational feeding will reduce violence, and the fact that committing suicide is an expression of the violence that one applies to himself, suggests that the number of suicides, which, in general, has increased in relative units in human society, will start to decrease. [According to the data of World Health Organization, it is written at [19]: "Suicide is now among the three leading causes of death among those aged 15–44 (male and female)."]

See also the said in [13] regarding the "epidemic of autism" in small children used to watch the TV programs with the "jumping" advertisement which is a very bad informational feeding of the developing brain trying to understand everything seriously.

Book [20] of G. Pearson may be recommended for an introduction to hooliganism in a more traditional sense. Work [21] further-supports the conculsions in [6–8, 12].

7. Proposition of a Student Project

Since correct understanding of the problem of intellectual overburden, and finding a good solution of this problem, in the wide social scale, seems to belong to the future, let us suggest a relevant student project that might make the problem interesting for young people to whom this future belongs.

Since today the electrical activity of the brain and such responses as anger can be measured [6–8, 21], the direct project's target is just to check *the state of the brain activity* of different humans when they are receiving the "typical" information from Newspapers, Radio, TV, Internet, etc.. This experimental checking can be done in regular laboratory conditions, or when the person under investigation is sitting

against the driving-training fixture, because driving a car is a part of the common reality.

In our terms, one must detect whether or not the human receives the information as some suspicious gossip causing him to worry or be angry, or he treats the information in his mind by normal quiet thinking. Obtaining statistical data of the brain activity, which would distinguish between the two possibilities, would be very important.

Of course, there are some degrees of freedom left for the student's initiative, because such project, associated with technical, psychological, and biological sciences can help the student to grow as a researcher, but no science in depth is necessary for the experimental checking of the brain activity, and the project as such can be relevant for many students.

References

- [1] E. Gluskin, Cruelty as the "medicine" treating an unbalance in the development of the brain's hemispheres, *International Journal of Neuroscience*, **119**, no. 8, 1150–1154, (2009).
- [2] Lewis Parle, The English Riots: The Autopsy Is Well Underway, *Slaw*, (2011), December 12.
- [3] J. Bradshaw, Hemispheric specialization and psychological function, Wiley.
- [4] R. F. Thomson, The brain, a neuroscience primer, Worth Publishers, New York, 2000.
- [5] S. Pinker, How the mind works, W.W. Norton, New York, 2004.
- [6] D. Hofman and D. J. L.G. Schutter, Inside the wire: Aggression and functional interhemispheric connectivity in the human brain, *Psychophysiology*, 46, no. 5, 1054–1058, (2009).
- [7] P. M. Keune, L. van der Heiden, B. Varkuti, L. Konicar, R. Veit, and N. Birbaumer, Prefrontal brain asymmetry and aggression in imprisoned violent offenders, *Neuroscience Letters*, 515, no. 2, 191–195, (2012).
- [8] P. M. Keune, M. Schöenberg, S. Wyckoff, K. Mayer, S. Riemann, M. Hautzinger, and U. Strehl, Frontal alpha-asymmetry in adults with attention deficit hyperactivity disorder: Replication and specification, *Biological Psychology*, 87, no. 2, 306–310, (2011).
- [9] E. Gluskin, Electrical ANN Circuits (1-ports) and Schrödinger's What is Life?, 210–213, Proceedings of the Int. Conference: Nonlinear Dynamics of Electronic Systems (NDES 2012, 11-13 July 2012, Wolfenbuttel, Germany).
- [10] http://vixra.org/abs/1207.0082 (Slides for [9] extending the content of [9]; start from slide 32).
- [11] E. Gluskin, The second project for the 21-th century student: Let us try to use Schrödinger's hypothesis about the role of negentropy for life to help in solving the problem of hooliganism, (2012)., Manuscript, viXra:1208.0233.
- [12] E. Gluskin, Some system comments on the work of the brain hemispheres: the role of the 'Inputs', *American Journal of System Science*, **2**, no. 1, 1–7, (2013).
- [13] E. Gluskin, An argument regarding the nature of hooligan behavior, *Dialogues in Philosophy, Mental and Neuro Sciences*, **5**, no. 2, 51–53, (2012)., (see http://www.crossingdialogues.com/Ms-C12-01.pdf).
- [14] E. Schrodinger, What is life? First published 1944., (Complete text is available at: http://whatislife.stanford edu/LoCo_files/What-is-Life.pdf).

- [15] L. Brillouin, Science and information theory, Academic Press, New York, 1956.
- [16] S. G. Gindikin, Algebraic Logic, Problem Books in Mathematics, Springer-Verlag, New York, 1985.
- [17] Ya. M. Barzdin and A. N. Kolmogorov, On the realization of networks in three-dimensional space, in *Selected Works of A.N. Kolmogorov, vol. III: Informational Theory and the Theory of Algorithms*, Kluwer, London, 1970.
- [18] V. S. Kuzin, Psychologiya, Agar, Moscva, 1997, ("Psychology", in Russian).
- [19] http://www.befrienders.org/info/index.asp?PageURL= statistics.php.
- [20] G. Pearson, Hooligan: A History of Respectable Fears, Palgrave, Macmillan, 1983, ISBN 0333234006.
- [21] M. Larkin, Speech and sign language trigger similar brain activity, *The Lancet*, **356**, no. 9246, p. 1989, (2000).



Editor-in-Chief Mostafa Z. Badr, USA

Geographical Editors Christopher Corton, USA Jörg Mey, Spain Marcelo H. Napimoga, Brazil Nanping Wang, China

Associate Editors Leggy A. Arnold, USA Yaacov Barak, USA Thomas Burris, USA Ignacio Camacho-Arroyo, Mexico John Cidlowski, USA Lluis Fajas Coll, Switzerland Frédéric Flamant, France Mario Galigniana, Argentina Jan-Åke Gustafsson, USA Anton Jetten, USA Sridhar Mani, USA Antonio Moschetta, Italy Bryce M. Paschal, USA Bart Staels, France Yu-Jui Yvonne Wan, USA Jiemin Weng, China Wen Xie, USA

Editorial Board Brian J. Aneskievich, USA Jeffrey Arterburn, USA Robert G. Bennett, USA Carlos Bocos, Spain Moray Campbell, USA Susana Castro-Obregon, Mexico Thomas Chang, Canada Taosheng Chen, USA Hueng-Sik Choi, Republic of Korea Austin Cooney, USA Pietro Cozzini, Italy Maurizio Crestani, Italy Paul D. Drew, USA Nourdine Faresse, Switzerland Grace Guo, USA Heather Hostetler, USA Cheng Huang, China Wendong Huang, USA Jorge Joven, Spain Hiroki Kakuta, Japan Yuichiro Kanno, Japan Christopher Lau, USA Antigone Lazou, Greece Chih-Hao Lee, USA Xiaoying Li, China Yong Li, China Xiaochao Ma, USA Shaker A. Mousa, USA Suong N. T. Ngo, Australia Noa Noy, USA Sergio A. Onate, Chile Eric Ortlund, USA Petr Pávek, Czech Republic Richard P. Phipps, USA Eric Prossnitz, USA Enrique Saez, USA Edwin R. Sanchez, USA Andrea Sinz, Germany Knut Steffensen, Sweden Cecilia Williams, USA Xiao-kun Zhang, USA Chun-Li Zhang, USA Changcheng Zhou, USA

Dear Colleagues,

Although publications covering various aspects of nuclear receptors (NRs) appear every year in high impact journals, these publications are virtually buried among an overwhelming volume of articles that are only peripherally related to NRs. The latter fact prompted a group of prominent scientists active in the field of nuclear receptor research to conclude that gathering publications on this superfamily of receptors under one umbrella would provide an invaluable resource for a broad assemblage of scientists in the field; thus the idea for a new journal, **Nuclear Receptor Research**, was born.

I am pleased to share with you that **Nuclear Receptor Research** is now a reality as an open access peer-reviewed journal devoted to publishing high-quality, original research and review articles covering all aspects of basic and clinical investigations involving members of the nuclear receptor superfamily. **Nuclear Receptor Research** has an editorial board comprised of a group of renowned scientists from around the world. Board members are committed to make **Nuclear Receptor Research** a vibrant forum showcasing global efforts in this ever-expanding area of research.

We believe that the impact and visibility of papers related to nuclear receptors will be significantly enhanced by appearing in a journal devoted exclusively to nuclear receptors. In addition, it is hoped that **Nuclear Receptor Research** will serve as a catalyst to encourage collaborative studies as well as to foster interdisciplinary initiatives within this expansive and dynamic field. For these reasons, I invite you to consider **Nuclear Receptor Research** (http://www.agialpress.com/journals/nrr/) as a vehicle to share your novel research findings as well as your vision for the future of nuclear receptor research with your colleagues around the world.

Mostafa Badr Editor-in-Chief **Nuclear Receptor Research**